

# RIDOT TMC Incident Statistics 10/1/2011 To 12/31/2011

The Rhode Island transportation system serves 39 cities and towns, encompassing urban, suburban, and tourism areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is done quarterly. By making these statistics available to you, we hope that you can learn more about the program and understand the benefit of the services we provide to the Rhode Island motoring public.

The types of incidents tabulated in this report include disabled vehicles, debris on the roadway, emergency roadwork, vehicle accidents, and vehicle rollovers. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

NOTE: After reviewing the data collection process, the RIDOT TMC has decided that the Incident Recovery Time statistic is too subjective and difficult to accurately track. Further, the terms "Incident Clearance" and "Roadway Clearance" have been standardized by FHWA and were inconsistent with our reporting. Beginning in July 2011, we have modified the data collection process and the way we present the data to better conform with FHWA and industry best practices.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (http://www.tmc.state.ri.us), including construction and incident information.

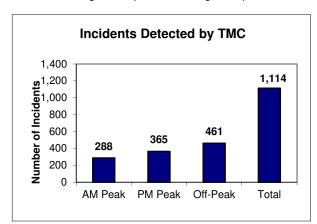
### **RIDOT TMC Incident Statistics Report**

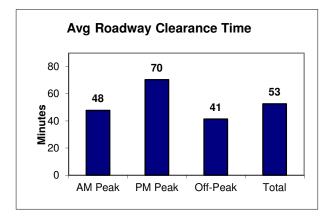
#### 1. Peak Period Incident Statistics\*

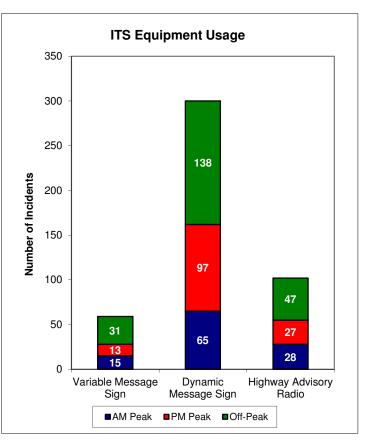
	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	294	374	475	1143
Avg. Incident Clearance Time (min)	48	72	43	54
Avg. Roadway Clearance Time (min)	48	70	41	53
# Detected by TMC Operators (CCVE)	168	68	201	437
# Detected by TMC, State Police	120	297	260	677
# Notified by RhodeWatchers	0	2	1	3
# Utilizing VMS	15	13	31	59
# Utilizing DMS	65	97	138	300
# Utilizing HAR	28	27	47	102
# Posted to Web	274	352	340	966
Avg. Delay Cost**	\$204,939	\$305,714	\$180,091	\$227,587
Total Delay Cost	\$60,252,094	\$114,336,871	\$85,543,252	\$260,132,217

<sup>\*</sup> AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

<sup>\*\*</sup> Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.







Note: Statistics in this report are only for incidents that the TMC reported or responded to during the quarter. They do not include all incidents that occurred on Rhode Island roadways.

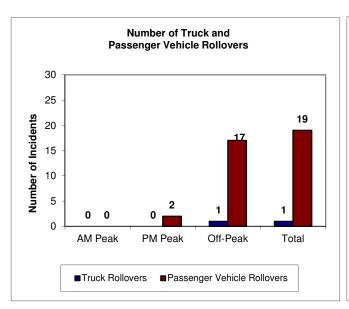
**Incident Clearance Time** is the time from the start of an incident (or when it is detected) to the time when responders leave the scene and/or the incident is declared as cleared.

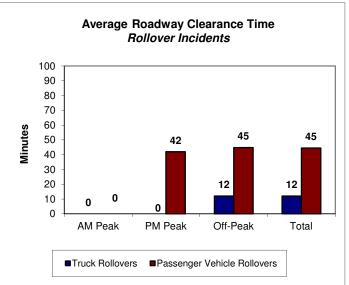
**Roadway Clearance Time** is the time from the start of an incident (or when it is detected) to the time when all travel lanes are available for traffic.

#### 2. Rollover Incident Statistics\*

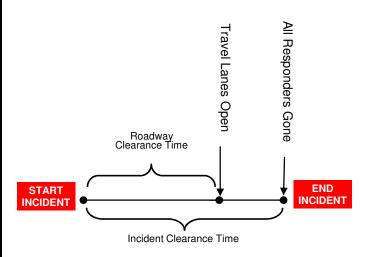
	Trucks			Automobiles				
			Off-		AM	PM	Off-	
VEHICLES	AM Peak	PM Peak	Peak	Total	Peak	Peak	Peak	Total
No. of Rollovers	0	0	1	1	0	2	17	19
Avg. Incident Clearance (min)	0	0	12	12	0	42	45	45
Avg. Roadway Clearance (min)	0	0	12	12	0	42	45	45

<sup>\*</sup> AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday





		Number
	Exit	Of
Roadway	Number	Rollovers
Interstate 195 Westbound	6	2
Interstate 195 Westbound	3	1
Interstate 295 Southbound	6	1
Interstate 295 Southbound	9A	1
Interstate 95 Northbound	19	1
Interstate 95 Northbound	15	1
Interstate 95 Northbound	18	1
Interstate 95 Southbound	9	2
Interstate 95 Southbound	22A	1
Interstate 95 Southbound	12B	1
Interstate 95 Southbound	25	1
Route 004 Northbound	6	1
Route 006 Westbound	N/A	1
Route 006/10 Northbound	N/A	1
Route 010 Northbound	N/A	2
Route 010 Southbound	N/A	2
	TOTAL	20



NOTE: The data collection procedure has been modified starting in July 2011, as illustrated in the new diagram above. The terms "Incident Clearance" and "Roadway Clearance" have been standardized by FHWA and better conform with industry best practices.

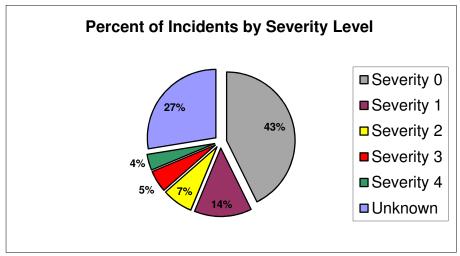
#### 3. Incidents by Severity Level

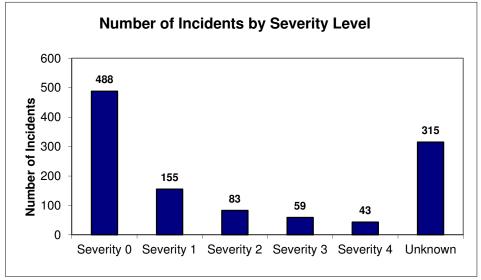
Severity Level*	No. of Incidents
Severity 0	488
Severity 1	155
Severity 2	83
Severity 3	59
Severity 4	43
Unknown	315
Total	1143

Number of Incident	ts with a Secondary
Incident:	12

Percentage of Incidents with a Secondary Incident: 1.05%

Note: A "secondary" incident is one that is the result of an earlier incident.





#### \*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR hazardous materials (HAZMAT) w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

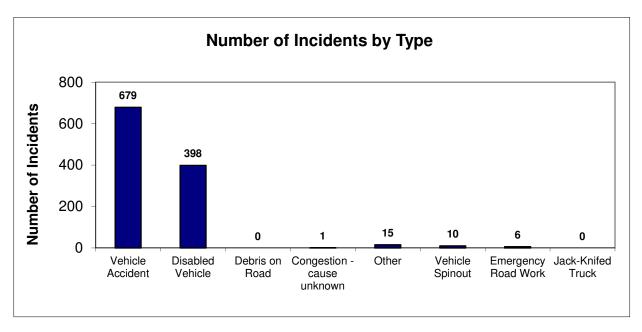
Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

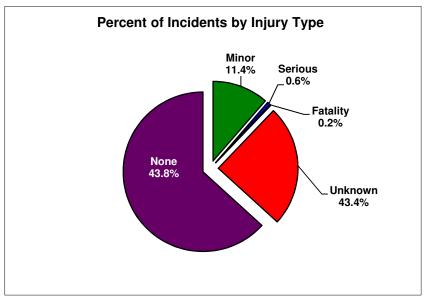
# 4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	679
Disabled Vehicle	398
Debris on Road	0
Congestion - cause unknown	1
Other	15
Vehicle Spinout	10
Emergency Road Work	6
Jack-Knifed Truck	0
Total Number of Incidents	1109

# 5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	130
Serious	7
Fatality	2
Unknown	281
None	723
Total	1143





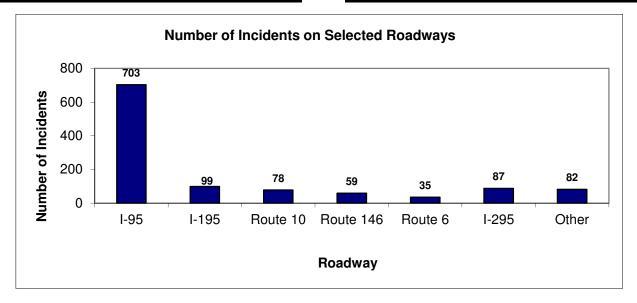
# 6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	877
Wet	259
lcy	5
Snow-Covered	2
Flooded	0
Other	0
Total	1143
Precipitation	
None	926
Light-moderate rain falling	177
Heavy rain falling	29
Light-moderate sleet falling	0
Heavy sleet falling	0
Light-moderate snow falling	11
Heavy snow falling	0
Total	1143
Wind	
Calm to Moderate	1115
Moderate to Strong	23
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	0
N/A	5
Total	1143
Visibility	
Clear	994
Light fog	14
Dense fog	1
Reduced- rain	123
Reduced-snow	10
Poor-heavy rain/sleet	0
Poor-heavy snow	0
Reduced-smoke	0
Other	0
N/A	1
Total	1143

# 7. Incidents Detected by Primary Notifier on Selected Roadways

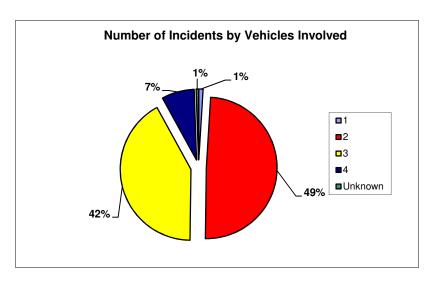
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	35
	State Police Scanner	59
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	5
	Total	99
I-95	TMC Operator	304
	State Police Scanner	357
	Local Fire Department	0
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	41
	Total	703
I-295	TMC Operator	28
	State Police Scanner	48
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	11
	Total	87

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	22
	State Police Scanner	49
	Local Fire Department	1
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	6
	Total	<i>78</i>
Route 146	TMC Operator	14
	State Police Scanner	37
	Local Fire Department	0
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	7
	Total	59
Route 6	TMC Operator	13
	State Police Scanner	17
	Local Fire Department	1
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	Transcom	0
	Other	4
	Total	35



# 8. Incidents by Number of Vehicles Involved

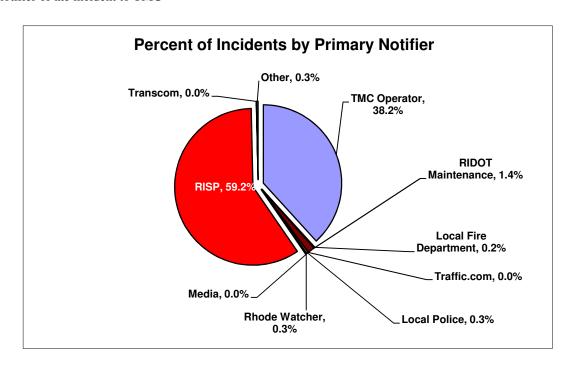
No. of Vehicles	No. of
Involved	Incidents
1	11
2	549
3	466
4	83
5	23
6	1
7	3
8	0
9	0
10+	1
Unknown	6
Total Incidents	1143

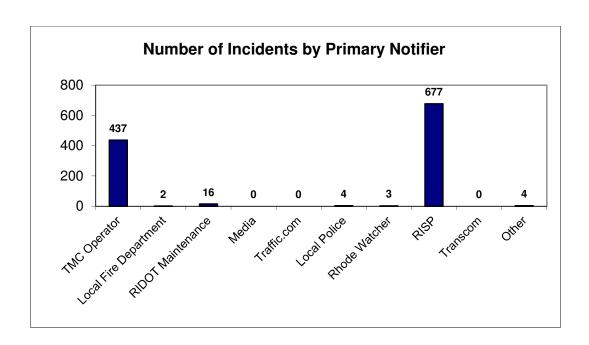


# 9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	437
Local Fire Department	2
RIDOT Maintenance	16
Media	0
Traffic.com	0
Local Police	4
Rhode Watcher	3
RISP	677
Transcom	0
Other	4
Total	1143

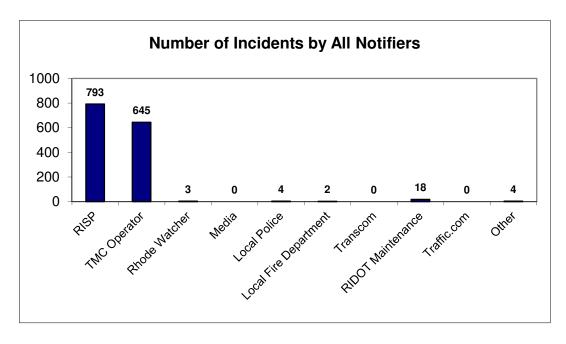
<sup>\*</sup>First notifier of the incident to TMC





Notifier	No. of Incidents
RISP	793
TMC Operator	645
Rhode Watcher	3
Media	0
Local Police	4
Local Fire Department	2
Transcom	0
RIDOT Maintenance	18
Traffic.com	0
Other	4

Note: Primary notifier indicates the first notifier of the incident to the TMC.
Additional notifiers are also logged, and are represented in the statistics for "all notifiers".



### 10. Incident Response

		Percent of Total
On-Scene Responding Agency	No. of Incidents	Incidents
State Police	909	79.53%
Tow	367	32.11%
Local Fire Department	215	18.81%
EMS	209	18.29%
Local Police	35	3.06%
Service Patrol	19	1.66%
Mass Highway	1	0.09%
DOT	26	2.27%
Hazmat	1	0.09%
DEM	4	0.35%
Connecticut DOT	0	0.00%
Construction	0	0.00%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	0	0.00%

	# of Incidents
# Utilizing Equipment (HAR,VMS or DMS)	338
# Utilizing VMS	59
# Utilizing DMS	300
# Utilizing HAR	102
# Posted to Web	966

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

